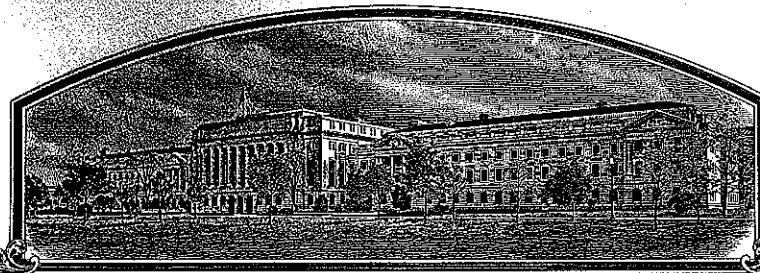


No.

200600266



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'ForageMax'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixth day of February, in the year two thousand and seven.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Syngenta Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER B980696	3. VARIETY NAME ForageMax
4. ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 6515 Ascher Road Junction City, Kansas 66441		5. TELEPHONE (include area code) 785-210-0218	<div style="border: 1px solid black; padding: 5px;"> FOR OFFICIAL USE ONLY PVPO NUMBER <div style="font-size: 2em; font-weight: bold; text-align: center;">200600266</div> FILING DATE <div style="font-size: 1.2em; font-weight: bold; text-align: center;">August 14, 2006</div> </div>
6. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM ORGANIZATION (corporation, partnership, association, etc.) Corporation		6. FAX (include area code) 785-210-0231	
7. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware	9. DATE OF INCORPORATION 2000		
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Dr. Rollin Sears 6515 Ascher Road Junction City, Kansas 66441		<div style="border: 1px solid black; padding: 5px;"> FILING AND EXAMINATION FEES: <div style="display: flex; justify-content: space-between;"> F E E S R E C E I V E D </div> <div style="display: flex; justify-content: space-between;"> \$ 3652.00 + 730.00 DATE 8/14/2006 </div> <div style="display: flex; justify-content: space-between;"> CERTIFICATION FEE: DATE 12/12/2006 </div> </div>	
11. TELEPHONE (include area code) 785-210-0218	12. FAX (include area code) 785-210-0231	13. E-MAIL rollin.sears@agripro.com	
14. CROP KIND (Common Name) Soft Red Winter Wheat	16. FAMILY NAME (Botanical) Gramineae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Triticum aestivum	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
SIGNATURE OF OWNER 		SIGNATURE OF OWNER 	
NAME (Please print or type) Dr. Rollin Sears		NAME (Please print or type) Dr. Rollin Sears	
CAPACITY OR TITLE R&D Manager	DATE 7/15/2006	CAPACITY OR TITLE R&D Manager	DATE 7/15/2006

(See reverse for instructions and information collection burden statement)

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. **Retain one copy for your files.** All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
none

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A.

Origin and Breeding History of ForageMax

ForageMax is a soft red winter wheat line developed by Syngenta Seeds, Inc. from a cross-made in 1991. The pedigree is L880421/Boranjka. L880421 is an unreleased breeding line developed by Syngenta Seeds, Inc. with a pedigree of Roland /McNair 1003. Roland is a variety released by Illinois AES; USAD-ARS in 1977. McNair 1003 is a variety released by McNair Seed Co. in 1977. Boranjka is a variety released in Yugoslavia in 1979 with a pedigree of Sanja/TP. 114-1965A//Sanja (ZG 4740-66). A bulk breeding system was used to develop ForageMax. An F6 derived head row was selected, with yield testing initiated in the 1998-99 season at the F8 generation. The line was designated B980696. Advanced and elite yield testing along with seed increase has been conducted since this time. In early generations, advancement was based on agronomic characteristics and disease resistance. Selection in advanced generations was based on yield, along with agronomic and disease characteristics.

Breeder seed of ForageMax was developed by selecting 100-200 heads from a bulk increase at Bay, AR in the 1999-2000 season. These were subsequently grown as nested head rows and plots by research, for the next two generations. A third generation was grown by seedstock/production, which was also kept separate and selected for uniformity, purity and stability. Seed harvested from these plots was then bulked to form breeder seed. A portion of breeder seed will be kept in cold storage at Bay, AR to be used for purification if contamination of breeder seed occurs.

ForageMax is an F6 derived head row with yield testing initiated as an F8 in 1998-1999. The line has been tested and observed for 7 years over multiple environments with 6 years of seed increase. ForageMax is stable and uniform. Breeder seed was developed by bulking seed from head row generated increase strips that had been maintained separately for three (F10, F11, and F12) generations of increase for purity, uniformity and stability comparisons. Variants may include one or more of the following in any combination; taller, awned, bronze or later type, which maybe expressed up to 1%.

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Exhibit B.

Statement of Distinctness

ForageMax most closely resembles COKER 9474, however it can be easily distinguished by the following characteristics.

- ForageMax has a white coleoptile where COKER 9474 has a red coleoptile.
- ForageMax is 4 days later than COKER 9474 in maturity.
- ForageMax is susceptible to Hessian fly where COKER 9474 is resistant to Biotype E.

	Coleoptile Color*	Head Date from April 1 at Bay, AR	Head Date from April 1 at Bay, AR	Hessian Fly** 2000	2000	2001	2002	2002	2002
LINE		2003	2004	BIOTYPE E	BIOTYPE L	BIOTYPE L	BIOTYPE O	BIOTYPE E	BIOTYPE L
FORAGEMAX	WHITE	4/24	4/23	0/14	0/16	0/15	0/16	1/14	1/11
COKER 9474	RED	4/20	4/20	18/0	0/18	0/13	0/17	13/2	0/14
LSD (0.05)		2.0	1.0						
CV%		1.0	1.0						
#reps		3	3						

**Coleoptile colors were determined by Arkansas State Plant Board Seed Laboratory.

**#/# = Resistant/Susceptible seedlings.

Screening done by USDA-ARS, Crop Production and Pest Control Research Unit, West Lafayette,

IN

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* Spp.)

NAME OF APPLICANT(S)

Syngenta Seeds, Inc.

FOR OFFICIAL USE ONLY

PVPO NUMBER

200600266

ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)

6515 Ascher Road

Junction City, Kansas 66441

NAME OR EXPERIMENTAL

DESIGNATION

ForageMax

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in the first box when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized standard may be used to determine plant colors; designate system used.

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

1

1=Common

2=Durum

3=Club

4=Other (specify)

2. VERNALIZATION:

2

1=Spring

2=Winter

3=Other (specify)

3. COLEOPTILE ANTHOCYANIN:

1

1=Absent

2=Present

4. JUVENILE PLANT GROWTH:

2

1=Prostrate

2=Semi-erect

3=Erect

5. PLANT COLOR (boot stage):

2

1 = Yellow-Green

2 = Green

3 = Blue-Green

6. FLAG LEAF (boot stage):

1

1 = Erect

2 = Recurved

2

1 = Not Twisted

2 = Twisted

7. EAR EMERGENCE:

0

0

Number of Days Earlier Than

*

0

2

Number of Days Later Than

COKER 9474

*

8. ANTHOR COLOR:

1

1 = YELLOW

2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

0

0

cm Taller Than

*

0

3

cm Shorter Than

Patton

* Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

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10. STEM:

A. ANTHOCYANIN

☒ 1 = Absent 2 = Present

B. WAXY BLOOM

☒ 2 = Absent 2 = PresentC. HAIRINESS (*last internode of rachis*)☒ 2 = Absent 2 = PresentD. INTERNODE (*specify number*)☒ 1 = Hollow 2 = Semi-solid 3 = Solid

E. PEDUNCLE

☐ 1 = Erect 2 = Recurved☐ 0 cm Length11. HEAD (*at Maturity*):

A. DENSITY

☒ 3 = Lax 2 = Middense 3 = Dense

B. SHAPE

☒ 1 = Tapering 2 = Strap 3 = Clavate 4 = Other (*specify*)

C. CURVATURE

☒ 2 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

☒ 2 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned12. GLUMES (*at Maturity*):

A. COLOR

☒ 2 = White 2 = Tan 3 = Other (*specify*)

B. SHOULDER

☒ 2 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

☒ 3 = Obtuse 2 = Acute 3 = Acuminate

D. LENGTH

☒ 2 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

☒ 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

☒ 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

☒ 1 = Rounded 2 = Angular

C. BRUSH

☒ 2 = Short 2 = Medium 3 = Long☒ 1 = Not Collared 2 = Collared

D. CREASE

☒ 2 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel☒ 2 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

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13. SEED: (continued)

E. COLOR

☒ 3 1 = White 2 = Amber 3 = Red 4 = Other (specify)

F. TEXTURE

☒ 2 1=Hard 2=Soft

G. PHENOL REACTION (see instructions):

☒ 0 1 = Ivory 2 = Fawn 3 = Light Brown 4 = Dark Brown 5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

<input checked="" type="checkbox"/> 0 Stem Rust (<i>Puccinia graminis</i> f. sp. <i>tritici</i>) Field races	<input checked="" type="checkbox"/> 4 Leaf Rust (<i>Puccinia recondita</i> f. sp. <i>tritici</i>) Field races
<input checked="" type="checkbox"/> 2 Stripe Rust (<i>Puccinia striiformis</i>)	<input checked="" type="checkbox"/> 0 Loose Smut (<i>Ustilago tritici</i>)
<input checked="" type="checkbox"/> 0 Tan Spot (<i>Pyrenophora tritici-repentis</i>)	<input checked="" type="checkbox"/> 0 Flag Smut (<i>Urocystis agropyri</i>)
<input checked="" type="checkbox"/> 0 Halo Spot (<i>Selenophoma donacis</i>)	<input checked="" type="checkbox"/> 0 Common Bunt (<i>Tilletia tritici</i> or <i>T. laevis</i>)
<input checked="" type="checkbox"/> 0 <i>Septoria nodorum</i> (Glume Blotch)	<input checked="" type="checkbox"/> 0 Dwarf Bunt (<i>Tilletia controversa</i>)
<input checked="" type="checkbox"/> 0 <i>Septoria avenae</i> (Speckled Leaf Disease)	<input checked="" type="checkbox"/> 0 Karnal Bunt (<i>Tilletia indica</i>)
<input checked="" type="checkbox"/> 3 <i>Septoria tritici</i> (Speckled Leaf Blotch) Field races	<input checked="" type="checkbox"/> 3 Powdery Mildew (<i>Erysiphe graminis</i> f. sp. <i>tritici</i>) Field races
<input checked="" type="checkbox"/> 0 Scab (<i>Fusarium</i> spp.)	<input checked="" type="checkbox"/> 0 Snow Molds
<input checked="" type="checkbox"/> 0 Black Point (Kemel Smudge)	<input checked="" type="checkbox"/> 0 Common Root Rot (<i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.)
<input checked="" type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV)	<input checked="" type="checkbox"/> 0 Rhizoctonia Root Rot (<i>Rhizoctonia solani</i>)
<input checked="" type="checkbox"/> 2 Soilborne Mosaic Virus (SBMV) Field races	<input checked="" type="checkbox"/> 0 Black Chaff (<i>Xanthomonas campestris</i> pv. <i>translucens</i>)
<input checked="" type="checkbox"/> 4 Wheat Yellow (Spindle Streak) Mosaic Virus Field races	<input checked="" type="checkbox"/> 0 Bacterial Leaf Blight (<i>Pseudomonas syringae</i> pv. <i>syringae</i>)
<input checked="" type="checkbox"/> 0 Wheat Streak Mosaic Virus (WSMV) Field races	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify)

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

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PLEASE SPECIFY BIOTYPE (where needed)

<input type="checkbox"/>	Hessian Fly (<i>Mayetiola destructor</i>)	<input type="checkbox"/>	Other (<i>specify</i>)
<input checked="" type="checkbox"/>	Stem Sawfly (<i>Cephus</i> spp.)	<input type="checkbox"/>	Other (<i>specify</i>)
<input checked="" type="checkbox"/>	Cereal Leaf Beetle (<i>Oulema melanopa</i>)	<input type="checkbox"/>	Other (<i>specify</i>)
<input checked="" type="checkbox"/>	Russian Aphid (<i>Diuraphis noxia</i>)	<input type="checkbox"/>	Other (<i>specify</i>)
<input checked="" type="checkbox"/>	Greenbug (<i>Schizaphis graminum</i>)	<input type="checkbox"/>	Other (<i>specify</i>)
<input checked="" type="checkbox"/>	Aphids		

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

Exhibit D.
Additional Description of ForageMax

ForageMax is adapted to the lower Corn Belt, throughout the mid south and into the upper east coast area. Testing in Illinois, Missouri, Tennessee, Kentucky, Arkansas, Louisiana, Mississippi, Georgia, South Carolina, North Carolina, Virginia and Pennsylvania for the past 4 years has indicated the areas where ForageMax is best adapted. ForageMax was tested in the Uniform Eastern Soft Red Winter Wheat Nursery and the Uniform Southern Soft Red Winter Wheat Nursery in the 2002-2003 and 2003-2004 seasons. ForageMax has competitive yields and good agronomic characteristics in the adapted area.

ForageMax is resistant to prevalent field races of stripe rust in the mid south and the east coast areas and tolerant to prevalent races of leaf rust in the mid south and the east coast areas. It has intermediate resistance to *Septoria tritici* and to the prevalent field races of powdery mildew in the east coast area. Tolerance has been expressed to wheat spindle streak virus and resistance to soil borne mosaic virus. ForageMax is susceptible Hessian Fly. Acceptable milling qualities as compared to standards COKER 9543 and COKER 9184 have been shown.

The coleoptile color of ForageMax is white with a semi-erect juvenile plant growth habit. Plant color at booting is green and the flag leaf is recurved, twisted and has a waxy bloom. Auricle anthocyanin is absent and auricle hairs are present. Glumes are midlong in length and narrow in width. Heads are apically awnletted, tapering and inclined at maturity. Seed shape is ovate with a medium brush hair length. Seed crease depth is middeep and width is midwide.

B980696

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Table 1: Yield Data Bu/Ac

	ALL LOCATIONS		CORNBELT		MIDSOUTH		UPPER EAST COAST	
	1 YR	2 YR	1 YR	2 YR	1 YR	2 YR	1 YR	2 YR
B980696	66	68	65	72	65	66	73	64
COKER 9663	67	68	65	74	65	64	71	66
COKER 9152	67	69	64	74	66	68	71	64
COKER 9184	66	62	56	58	61	59	77	65
COKER 9474	62	62	62	69	57	55	66	59
26R61	61	61	46	54	63	63	71	59
AGS 2000	68	67	61	68	72	68	71	64
Patton	67	66	64	71	62	59	76	65
25R26	71	68	65	70	70	64	80	66
Kaskaskia	61	63	56	66	60	62	67	58
Test Mean	65	67	60	69	64	64	72	64
Trials w/ Data	18	34	6	12	7	13	4	8
LSD (0.05)	4.5	3.6	7.2	5.7	6.5	5.4	8.8	ns
CV %	10.7	11.3	10.6	10.3	9.8	10.9	11.6	ns
1 YR = 2004	2 YR = 2003 & 2004							

**2004 SYNGENTA SEEDS NAFTA WHEAT
LOCATIONS BY AREA**

ELITE	NAME	ALL	Cornbelt	Midsouth	Upper East Coast
2003-2004	US BERNIE, MO 1110	BMO	BMO	BMO	
	US UNION CITY, TN 1120	UCTN	UCTN		
	US HOPKINSVILLE, KY 1135	HKY	HKY		
	US COLUMBIA, MO 1140	CMO	CMO		
	US ST. JACOB, IL 1150	SJIL	SJIL		
	US WAUSEON, OH 1170	WOH	WOH		
	US BAY, AR 2210	BAR		BAR	
	US DEWITT, AR 2220	DAR		DAR	
	US WHITEHALL, AR 2230	WAR		WAR	
	US MACON, MS 3310	MMS		MMS	
	US LEWISVILLE, AR 3330	LAR		LAR	
	US GREENVILLE, MS 3340	GMS		GMS	
	US PLYMOUTH, NC 4500	PNC			PNC
	US WINTERVILLE, NC 4510	WNC			WNC
	US KINSTON, NC 4520	KNC			KNC
	US WARSAW, VA 4530	WVA			WVA
	US PLAINS, GA 4600	PGA			
	US HARTSVILLE, SC 4650	HSC			
	US MOUNT JOY, PA 4710	MJPA			MJPA

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Table 2: Agronomic Characteristics

	Test Weight Lb/Bu		Heading Date from 4/1 at Bay, AR		Height Inches	Lodging 1 - 9		Juvenile Growth Habit 1 - 5		
	2003	2004	2003	2004		2003	2004	2002 BMO	2003 BAR	2004 BAR
B980696	57.6	58.6	4/24	4/23	36	2	3	2	2	2
COKER 9663	55.3	57.4	4/21	4/18	40	3	4	2	3	3
COKER 9152	54.5	57.1	4/18	4/17	39	2	3	2	3	3
COKER 9184	53.9	58.0	4/23	4/20	33	2	2	3	3	3
COKER 9474	55.4	59.1	4/20	4/20	34	2	2	2	1	1
26R61	54.9	56.1	4/17	4/17	37	1	2	2	4	3
AGS 2000	54.4	56.8	4/16	4/17	36	3	4	3	4	4
PATTON	51.7	56.0	4/19	4/20	37	2	3	1	2	2
25R26	50.9	56.7	4/22	4/20	34	2	2	2	1	2
KASKASKIA	56.1	56.9	4/25	4/24	38	2	3	2	1	1
Test Mean	54.5	56.9	4/21	4/20	36	2	3	2	3	3
Trials w/ Data	12	15	1	1	14	10	7	1	1	1
LSD (0.05)	3.0	1.3	2.0	1.0	1.0	0.7	1.0	0.6	0.6	0.7
CV %	7.1	3.3	1.0	1.0	4.0	42.6	31.4	17.1	14.5	15.5
Reps			3	3				3	3	3

Test Weight (lb/bu): Average test weight across 12 locations in 2003 and 15 location in 2004.

Heading Date: Average date after April 1 at Bay, AR 2003, and 2004.

Height: Averaged over 14 locations in 2004.

Lodging 1 - 9 1 = none 2003, 10 locations. 2004, 7 locations.

Growth Habit 1 - 5 1 = Prostrate 3 = Semi-Erect 5 = Erect Averaged over 3 reps from Bay, AR 2003 & 2004, Bernie, MO 2002.

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Table 3: Leaf Rust

	2002						2004		
	BAR	MMS	PNC	WNC	PGA	DSC	BAR	LAR	PNC
B980696	1	4	2	2	4	2	3	2	1
COKER 9663	3	5	6	3	8	4	6	3	2
COKER 9152	1	1	2	2	1	1	2	1	3
COKER 9184	2	1	2	2	2	2	2	4	5
COKER 9474	2	2	2	2	3	2	2	1	1
26R61	1	2	2	2	4	2	3	2	3
AGS 2000	1	2	3	2	2	1	2	2	1
PATTON	2	1	4	2	4	1	3	3	5
25R26	2	3	2	1	5	2	5	1	3
KASKASKIA	3	3	2	2	7	1	3	1	1
Test Mean	2	3	4	3	5	2	3	3	4
LSD (0.05)	1.1	2.1	1.0	1.2	2.7	1.9	1.6	1.8	1.8
CV %	32.8	36.1	17.8	26.7	29.3	42.9	29.6	43.1	29.4
Reps w/ Data	3	2	3	3	2	2	3	3	3

Scale 1 – 9 1 = Resistant

HKY: Henderson, KY; PNC: Plymouth, NC; PGA: Plains, GA; BAR: Bay, AR; MMS: Macon, MS; LAR: Lewisville, AR; WNC: Winterville, NC; DSC: Dillon, SC

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Table 4: Powdery Mildew

	2003				2004			
	MJPA	WNC	KNC	DSC	KNC	WNC	DSC	LAR
B980696	2	3	3	2	4	3	3	5
COKER 9663	2	5	5	3	5	3	4	6
COKER 9152	2	5	5	5	5	4	4	3
COKER 9184	1	3	4	2	3	2	2	2
COKER 9474	2	3	3	2	5	3	3	5
26R61	2	1	2	1	3	3	2	2
AGS 2000	2	1	2	1	2	1	1	1
PATTON	4	3	4	1	5	3	3	6
25R26	2	3	4	2	4	3	4	4
KASKASKIA	4	4	6	3	5	2	4	7
Test Mean	2	3	4	1	4	2	3	4
LSD (0.05)	1.4	1.3	1.6	1.8	1.7	1.3	1.3	2.1
CV %	48.2	28.6	22.2	31.3	21.5	36.1	28.8	30.1
Reps w/ Data	3	3	2	2	2	3	3	3

Scale 1 – 9 1 = Resistant

KNC: Kinston, NC; WNC: Winterville, NC; MJPA: Mount Joy, PA; DSC: Dillon, SC;
 LAR: Lewisville, AR

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Table 5: Stripe Rust

	Stripe Rust							
	2002 LAR	2003 CMO	2003 DAR	2003 LAR	2003 GMS	2003 PGA	2003 BRLA	2004 DAR
B980696	2	2	1	2	1	2	1	1
COKER 9663	5	3	5	6	3	8	6	2
COKER 9152	4	4	3	4	2	8	1	3
COKER 9184	7	5	6	8	3	8	2	3
COKER 9474	4	3	6	6	4	6	4	3
26R61	2	2	1	2	2	2	1	1
AGS 2000	7	4	6	7	4	8	4	3
PATTON	7	5	7	6	5	8	7	4
25R26	7	4	6	7	3	8	2	3
KASKASKIA	4	3	1	5	1	6	1	2
Test Mean	5	4	4	6	3	6	-	3
LSD (0.05)	1.7	1.6	3.4	1.2	2.1			1.4
CV %	18.8	25.2	41.0	12.5	46.2			34.5
Reps w/ Data	3	3	2	3	2	1	1	3
Scale 1 – 9 1 = Resistant								

LAR: Lewisville, AR; CMO: Columbia, MO; DAR: Dewitt, AR; GMS: Greenville, MS; PGA: Plains, GA;
BRLA: Baton Rouge, LA

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Table 6: Other Diseases

	Septoria tritici			Wheat Spindle Streak Virus	Soil Borne Mosaic Virus	
	2001 BRLA	2002 HKY	2003 CMO	2004 PNC	2002 BMO	2002 UCTN
B980696	2	3	5	4	2	1
COKER 9663	3	3	3	7	2	4
COKER 9152	6	4	5	3	2	4
COKER 9184	2	6	5	4	3	1
COKER 9474	4	3	5	5	2	1
26R61	2	4	4	4	1	3
AGS 2000	3	4	4	8	2	6
PATTON	3	4	4	3	1	1
25R26	3	5	6	4	1	1
KASKASKIA	3	3	6	4	2	1
Test Mean	-	4	5	4	2	2
LSD (0.05)	-	1.1	1.3	1.5	1.5	1.5
CV %	-	16.3	16.1	17.8	44.3	45.4
Reps w/ Data	1	3	3	2	3	3
Scale 1 – 9 1 = Resistant						

BRLA: Baton Rouge, LA; HKY: Henderson, KY; CMO: Columbia, MO; BAR: Bay, AR; BMO: Bernie, MO; UCTN: Union City, TN; PNC: Plymouth, NC

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Table 7: Hessian Fly

Biotypes	2002			2003		2004		
	O	E	L	O	L	O	E	L
B980696	0/16	1/14	0/11	0/18	0/16	0/13	0/13	0/14
COKER 9474	0/17	13/2	0/14	7/8	0/13	0/13	13/0	0/15
COKER 9152	0/14	0/13	0/16	16/0	0/13	7/5	2/8	0/16
PATTON	0/11	16/0	0/9	0/18	0/12	0/14	10/2	0/13
KASKASKIA	0/16	0/14	0/16	0/20	0/17	0/12	0/16	0/12

##/# = Resistant/Susceptible seedlings.

Screening done by USDA-ARS, Crop Production and Pest Control Research Unit, West Lafayette, IN.

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Table 8: Milling and Baking Quality

	Milling	Baking	Micro Test Wt LB/BU	Softness Equival. %	Flour Yield %	Flour Protein %	Micro AWRC	Cookie Dia.	Top Grade	Lactic Acid Ret'n
2003 Crop										
Standard CK 9184	72.8 B	57.5 D	60.5	66.9	70.7	7.85		18.09	4	126.9
B980696	82.2 A	33.5 F	59.5	54.1Q	72.6	7.58		17.13Q	4	129.1
2002 Crop										
Standard CK 9543	100	100	60.6	58.1	73.0	8.78	57.9	17.95	3	114.3
B980696	98.3 B	63.9 F	61.4	49.0Q	74.0	9.35	57.4	16.58Q	2	127.9
2001 Crop										
Standard CK 9543	100.0	100.0	61.9	57.5	72.2	9.37	53.45	17.86	4	129.0
B980696	96.4 B	25.8 F	64.6	46.1Q	72.9	9.91	61.0Q	15.83Q	2	128.4

Quality data from USDA Soft Wheat Quality Lab, Wooster, OH.
 2003, 2002, and 2001 ratings are from Syngenta Seeds, Inc. elite trials.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S)

Syngenta Seeds, Inc.

2. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER

B980696

3. VARIETY NAME

ForageMax

4. ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)

6515 Ascher Road
Junction City, Kansas 66441

5. TELEPHONE (include area code)

785-210-0218

6. FAX (include area code)

785-210-0231

7. PVPO NUMBER

2006-00266

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

☒ YES☐ NO

10. Is the applicant the original owner?

☒ YES☐ NOIf no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES☐ NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES☐ NO

If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Please see following page.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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Exhibit E.

Statement of the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was developed by June Hancock, an employee of Syngenta Seeds, Inc. By agreement between employees and Syngenta, all rights to any invention, discovery, or development made by the employee while employed by Syngenta, were assigned to Syngenta Seeds, Inc., with no rights of any kind pertaining to 'ForageMax' being retained by the employees.

The variety 'ForageMax' is owned by Syngenta Seeds, Inc.